

**What is claimed is:**

1. A miniature vocal transmitter device, comprising:

a cable-receiving structure, comprising a case, a cable-winding plate, a connection cable and a spiral spring, the cable-winding plate and the spiral spring being arranged in the case, and the connection cable being wound around the cable-winding plate;

an earphone, connected to a first terminal of the connection cable;

a fastener, mounted on the case of the cable-receiving structure; and

a microphone, arranged either in the case of the cable-receiving structure or the fastener, and further connected to a second terminal of the connection cable.

2. The device of claim 1, wherein a cable-receiving cavity is defined in the case of the cable-receiving structure for holding the cable-winding plate, a cable hole being defined through a sidewall of the cable-receiving cavity to enable the connection cable to be extended there through, an inner surface of the cable-receiving cavity being centrally provided with a axle through which a slot is axially defined, the axle with the axially defined slot engaging through the case to connect a groove externally defined on the case, thereby the second terminal of the connection cable being extended out of the case through the slot of the axle.

3. The device of claim 2, wherein a central axle hole is defined in a central portion of the cable-winding plate; a cable-winding ring and a spring fastening member being further placed over two opposite surfaces of the cable-winding plate, the cable-winding plate being pivotally connected to the axle, the connection cable being wound around the cable-winding ring and the axle, the spiral spring being arranged inside the spring fastening member, and a first attachment end of the spiral spring being

further fastened with the spring fastening member while a second attachment end of the spiral spring being fastened with the axle.

4. The device of claim 1, wherein either the case of the cable-receiving structure or the fastener is provided with a sound hole  
5 corresponding to the microphone.

5. The device of claim 1, wherein a connector connected to the connection cable is further provided either in the case of the cable-receiving structure or the fastener.

6. The device of claim 1, wherein a wireless receiver is provided  
10 either in the case of the cable-receiving structure or the fastener.

7. The device of claim 1, wherein a microphone support, a sealing member, and a switch are further provided either on the cable-receiving structure or the fastener, the microphone being a capacitance microphone which is arranged inside the microphone support and locally adhered to an  
15 inner wall of the microphone support, thereby defining a clearance between the capacitance microphone and the microphone support; the sealing member matching a hole of the microphone support, the hole being communicated with the clearance; the switch being located outside the microphone support to control the sealing member connected to the switch;  
20 the sealing member moving upward or downward along with an upward or downward move of the switch in the microphone support, thereby closing or opening the clearance between the capacitance microphone and the microphone support.

8. The device of claim 7, wherein a resilient member is further  
25 provided between the microphone support and either the case of the cable-receiving structure or the fastener.

9. The device of claim 1, wherein a switch connected to the connection cable is further provided on the case of the cable-receiving structure.

10. The device of claim 1, wherein the back-and-forth controller  
5 includes an oscillating member and a toothed wheel, an immobilization or winding of the cable-winding plate being thereby achieved via a reverse pull-out/release manipulation on the connection cable.

11. The device of claim 11, wherein the fastener includes a clipping  
10 device that has a resilient connecting part integrally formed with the connection of the fastener with the case so that the clipping device is clipped on a user's cloth by means of the resilient connecting part as a pivot.